Many new figures have been added to the work, but some have been retained which should have been rejected. Some minor errors are noticeable. Dr. Dall will be surprised to see that he is cited on page 177 as a writer on extinct frogs! The edition as a whole is very welcome to every student of extinct vertebrates; we only regret that the English edition might not also be brought up to date and the mammals included.

S. W. W.

"Beiträge zur Kenntnis der Oligozänen Landsäugetiere aus dem Fayum (Aegypten)." By MAX SCHLOSSER. *Beiträge zur Paläontologie und Geologie*, XXIV (1911), pp. 51–167; Pls. IX–XVI.

Perhaps no discoveries of extinct animals in recent years have excited more general interest than those of the Oligocene of the Fayum in Africa, as first made known by Beadnell and Andrews and later by Osborn. The present contribution by Schlosser, based upon extensive collections made for the Stuttgart Museum, adds very materially to this interest. In it he describes and figures new creodonts and rodents, an insectivore, a bat, and three new genera of primates of especial interest. And our knowledge of the Hyracoidea is also materially increased by the addition of much new material—"so dass die Andrewsche Monographie auch für diese Gruppe volkommen veraltet erscheint."

Most interesting of his discoveries is the new simiid *Propliopithecus;* and but little less so are his new genera *Parapithecus* and *Moeropithecus*, the former representing a new family of anthropoids. *Propliopithecus* he believes has a direct genetic relationship with *Homo:* "Aber auch für die Ableitung der Gattung *Homo* und wohl auch der Gattung *Pithecanthropus* (wenn nicht mit *Homo* identisch) von den oligozänen Genus *Propliopithecus* besteht kein prinzipielles Hinderness, denn in den oben berücksichtigen Merkmalen hat die Gattung *Homo* mit *Propliopithecus* sogar entschiedene grössere Aehnlichkeit als alle lebenden Simiiden-Gattungen." And he thinks that the recognition of this African antecedent of *Homo* is to be welcomed as doing away with the necessity of resorting to eoliths as proof of the existence of ancient Man. "If now *Propliopithecus* is the direct ancestor of Man the impossibility of his making eoliths is evident, since *Propliopithecus* had probably only the body dimensions of a human infant, and that so small a creature could have used stones of the size of the usual eoliths no one will seriously affirm." In the evolution of the Hominidae, aside from the gradual increase in body size, there has been a shortening of the premolars, a

decrease in size of the canines, and a development of an arched form of the lower jaws. He complains that many paleontologists have not appreciated the law of increase in size as a fundamental one in evolution, but, if the mammalologists have not appreciated it, surely other paleontologists have.

As regards the relationships between the South American and the Old World and North American mammalian faunas he says: "While the other orders are already represented in the South American *Notostylops* fauna, we have to deal, especially in the rodents and primates, with new faunal elements which must have gone thither either in the Oligocene or at the beginning of the Miocene. And they could have gone only from Europe or northern Africa, since, as we have seen, these rodents are closely related to the European forms, and the primates have at least a closer relationship with those of the Fayum than with those of the North American Eocene. There must, therefore, have been a connection between South America and the Old World in the Oligocene or at the beginning of the Miocene." This theory has already been urged by Ameghino. "This connection could not have been a broad land bridge, otherwise there would have been an exchange of the larger mammals, which did not occur till the Pliocene." He suggests that this migration of the smaller animals may have occurred from island to island of an archipelago, the creatures possibly carried by the larger birds of prey. And he thinks also that about the same time there was a like exchange of the smaller mammals between North America and Africa.

S. W. W.

The Cid Mining District of Davidson County, North Carolina. By JOSEPH E. POGUE. Raleigh: *Bull. No. 22 North Carolina Geol. Survey*, 1910. Pp. 144; Plates 22.

This district is located in the central portion of the Piedmont Plateau and includes areas of slate, tuffs, volcanic breccia, rhyolite, dacite, and andesite, cut by gabbro and diabase dikes. All but the dike rocks range from a massive to a schistose condition with sericite and greenstone schists as the final product of dynamic metamorphism. The slates are interbedded with rhyolitic and dacitic tuffs. The coarser acid volcanic breccia grades into rhyolite flows and is thought to be a flow breccia. The gabbro dikes are approximately parallel to the schistosity and are cut by diabase dikes, said to be Triassic. The evidence as to the Triassic